## Note to reader:

The following statistical analysis was reviewed by the Governor's Commission on Minority and Women's Business at its meeting held on May 16, 2005.

At the May 16<sup>th</sup> meeting, the Commission voted to utilize the participation goals recommended on page 6 in the *Statistical Analysis and Utilization Study for Indiana Contracts*. The motion to utilize the recommended goals carried by a vote of 7-3.

According to Title 25 Section 5 of the Indiana Administrative Code [25 IAC 5-7-3(a)(1)], the new participation goals, as set by the Commission, will become effective on July 1, 2005.

# Statistical Analysis of Utilization Study for Indiana Contracts between January 1, 2004, and April 15, 2005

Prepared by the Minority and Women's Business Enterprises Division Indiana Department of Administration May 16, 2005

#### **Summary**

According to Indiana Law, the Governor's Commission on Minority and Women's Business Enterprises is required to set annual participation goals for State agencies to use in the procurement process (IC 4-13-16.5-2(f)(7)). In an effort to assist the Commission with the goal-setting process, the MWBE staff consulted with Drew Klacik, Senior Policy Analyst in the Center for Urban Policy and the Environment at the IUPUI School of Public and Environmental Affairs and has analyzed the procurement data from January, 2004 through April, 2005.

The methodology utilized in this analysis is the same as the methodology utilized in *A Disparity Analysis for the City of Indianapolis Expenditures between January 1, 1999, and October 4, 2002* written by Mr. Klacik. The goal of the analysis is to determine the State's *potential* level of expenditures with minority-owned business enterprises (MBE) and women-owned business enterprises (WBE) as well as the State's *actual* level of expenditures with MBEs and WBEs. <sup>1</sup>

The analysis methodology consisted of determination of the potential and actual utilization as they relate to the number of MBE and WBE firms used as well as how they relate to the actual dollars spent.

# Background

The rates set by the Commission must be updated annually, and the rates are to be derived from a statistical analysis of state contracts. The most recent study or analysis available was conducted in 1999 – over six years ago. Case law indicates that a more recent and current analysis should be used.

The current rates were set by former IDOA Commissioner, Chuck Martindale, as directed by the Commission. The current rates are:

Construction –	MBE 3%	WBE 2%
Professional Services –	MBE 5%	WBE 5%
Supplies –	MBE 2%	WBE 3%

In an effort to conduct a statistical analysis of state expenditures, the Minority and Women's Business Enterprises Division searched for a study to use as a model. The City of Indianapolis recently concluded a study using the School of Public and Environmental Management (SPEA) at Indiana University Purdue University at Indianapolis (IUPUI), which is a well-respected institution. During the course of the City's study, IUPUI-SPEA completed the necessary research to determine the best approach for conducting this type of analysis, and the City's study received overwhelming support from our shared constituency. Therefore, the Minority and Women's Business Enterprises Division chose to model its analysis after the City of Indianapolis study.

The author of the City's study was willing to guide the Minority and Women's Business Enterprises Division in its analysis of State contracts, and he has verified the approach used in this analysis.

<sup>1</sup> Klacik, Drew. (2005). A Disparity Analysis for City of Indianapolis Expenditures between January 1, 1999, and October 4, 2002. Indianapolis, IN: p.1

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#### Firm Capacity and Utilization Analysis

*Industry Group* is defined as the three (3) types of state-purchased business. They are Construction, Professional Services, and Supplies, which are based on the internationally recognized UNSPSC codes. See Appendix A for a list of the types of firms within each industry group.

Category is defined as the type of firm. The types are Minority owned (MBE) and Woman owned (WBE).

Estimated Share of Firms is defined as the number of Minority and Woman owned firms (all Indiana certified MBE & WBE firms) available in each industry group divided by the number of total firms (all Indiana registered bidders) available in each industry group shown as a percentage.

Estimated Capacity of Firms is defined as the Estimated Share of firms (percentage) of the total firms actually conducting business with the state. For example, if the Estimated Share of MBE Construction firms is 10% and the total number of construction firms that are actually conducting business with the state is 500, then the Estimated Capacity of MBE Construction Firms is 50 ( $500 \times 10\% = 50$ ).

Actual Utilization of Firms is defined as the number of Minority and Woman owned firms that actually conducted business with the state.

Actual Share of Firms is defined as the number of Minority and Woman owned firms that actually conducted business with the state during the study period divided by the number of total firms that actually conducted business with the state during the study period shown as a percentage.<sup>2</sup>

Table 1: Firm Estimated Share and Actual Share

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	Estimated Share	Actual Share
Construction MBE	8.04%	2.40%
Construction WBE	7.45%	1.08%
Professional Services MBE	10.39%	1.49%
Professional Services WBE	11.21%	0.89%
Supplies MBE	3.97%	2.13%
Supplies WBE	3.84%	1.22%

<sup>&</sup>lt;sup>2</sup> Klacik, Drew. (2005). A Disparity Analysis for City of Indianapolis Expenditures between January1, 1999, and October 4, 2002. Indianapolis, IN: p. 27

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#### **Dollar Utilization Analysis**

*Industry Group* is defined as the three (3) types of state-purchased business. They are Construction, Professional Services, and Supplies.

Category is defined as the type of firm. The types are Minority owned (MBE) and Woman owned (WBE).

Estimated Capacity of Dollars Available is defined as the average amount spent per firm multiplied by the Estimated Capacity of Firms. For example, if the state spent \$1,000,000.00 on construction and the total number of construction firms is 200 and the estimated capacity of MBE construction firms is 50, then the Estimated Capacity of Dollars Available is \$250,000.00 (\$1,000,000.00 / 200 = 5000;  $5000 \times 50 = $250,000.00$ ).

Estimated Share of Dollars Spent is defined as the estimated capacity of dollars available divided by the actual dollars spent by the state shown as a percentage. Continuing the example from above, the Estimated Share of Dollars Spent is 25% (\$250,000.00 / \$1,000,000.00 = .25; .25 x 100 = 25%).

Actual Utilization of Dollars is defined as the actual dollars paid by the state to Minority and Woman owned firms.

Actual Share of Dollars Spent is defined as the actual dollars paid to Minority and Woman owned firms divided by the total dollars paid shown as a percentage.<sup>3</sup>

Table 2: Dollars Estimated Share and Actual Share

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	Estimated Share	Actual Share
Construction MBE	8.28%	2.15%
Construction WBE	7.41%	0.89%
Professional Services MBE	10.40%	6.95%
Professional Services WBE	11.14%	0.70%
Supplies MBE	3.96%	2.80%
Supplies WBE	3.81%	0.61%

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<sup>&</sup>lt;sup>3</sup> Klacik, Drew. (2005). A Disparity Analysis for City of Indianapolis Expenditures between January1, 1999, and October 4, 2002. Indianapolis, IN: p. 28

# **Disparity Determination**

As Drew Klacik stated in the City of Indianapolis Disparity Study,

"Disparity is the difference between capacity and utilization. In an ideal environment, capacity and utilization would be identical and the disparity measure would be zero. For the purposes of a disparity study, a disparity measure of less than zero (a negative number) suggests underutilization of MBE or WBE firms, and a disparity measure of greater than zero suggests over utilization."

Therefore, Actual minus Estimated equals disparity.

**Table 3: Firm Share Disparity** 

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	Firm Actual	Firm Estimated	Disparity
	Share	Share	Number
Construction MBE	2.40%	8.04%	-5.64%
Construction WBE	1.08%	7.45%	-6.37%
Professional Services MBE	1.49%	10.39%	-8.90%
Professional Services WBE	0.89%	11.21%	-10.32%
Supplies MBE	2.13%	3.97%	-1.84%
Supplies WBE	1.22%	3.84%	-2.62%

**Table 4: Dollars Share Disparity** 

	Dollars	Dollars	Disparity
	Actual Share	Estimated Share	Number
Construction MBE	2.15%	8.28%	-6.13%
Construction WBE	0.89%	7.41%	-6.52%
Professional Services MBE	6.95%	10.40%	-3.45%
Professional Services WBE	0.70%	11.14%	-10.44%
Supplies MBE	2.80%	3.96%	-1.16%
Supplies WBE	0.61%	3.81%	-3.20%

# **Disparity Averages**

For the purposes of recommending annual participation rates, the Minority and Women's Business Enterprises Division averaged the firm and dollars disparities.

**Table 5: Average Disparity** 

	MBE Average Disparity	WBE Average Disparity
Construction	5.89%	6.45%
Professional Services	6.18%	10.38%
Supplies	1.50%	2.91%

### **Recommended Participation Rates**

According to the Office of the Indiana Attorney General, the rates that are set are most defensible when they are closely based on a recent statistical analysis of Indiana contracts. Furthermore, if the rates are set too high, thus rendering them unattainable, it could jeopardize the entire program.<sup>4</sup> The rates are substantially the same as the average disparity findings. The MBE Professional Services and Supplies were adjusted slightly to reflect the current share of dollars expended.

**Table 6: Recommended Participation Rates** 

•	MBE Participation	WBE Participation
Construction	6%	6%
Professional Services	7%	10%
Supplies	3%	3%

<sup>&</sup>lt;sup>4</sup> Order Granting Preliminary Injunction. (2005). *Behavioral Interventions, Inc. v. Missouri Office of Administration, et al.* US District Court-Western District-Missouri.

# **Appendix A – Firm Types within Industry Groups**

Group	Description
Group Construction	Building and Construction Machinery and Accessories
Construction	Industrial Manufacturing and Processing Machinery and Accessories
Construction	Material Handling and Conditioning and Storage Machinery and their Accessories and Supplies
Construction	Power Generation and Distribution Machinery and Accessories
Construction	Tools and General Machinery
Construction	Structures and Building and Construction and Manufacturing Components and Supplies
Construction	Building and Construction and Maintenance Services
Services	Industrial Production and Manufacturing Services
Services	Industrial Cleaning Services
Services	Environmental Services
Services	Management and Business Professionals and Administrative Services
Services	Engineering and Research and Technology Based Services
Services	Editorial and Design and Graphic and Fine Art Services
Services	Public Utilities and Public Sector Related Services
Services	Financial and Insurance Services
Services	Healthcare Services
Services	Education and Training Services
Services	Travel and Food and Lodging and Entertainment Services
Services	Personal and Domestic Services
Services	National Defense and Public Order and Security and Safety Services
Services	Politics and Civic Affairs Services
Services	Organizations and Clubs
Supplies	Live Plant and Animal Material and Accessories and Supplies
Supplies	Mineral and Textile and Inedible Plant and Animal Materials
Supplies	Chemicals including Bio Chemicals and Gas Materials
Supplies	Resin and Rosin and Rubber and Foam and Film and Elastomeric Materials
Supplies	Paper Materials and Products
Supplies	Fuels and Fuel Additives and Lubricants and Anti corrosive Materials
Supplies	Mining and Well Drilling Machinery and Accessories
Supplies	Farming and Fishing and Forestry and Wildlife Machinery and Accessories
Supplies	Commercial and Military and Private Vehicles and their Accessories and Components
Supplies	Manufacturing Components and Supplies
Supplies	Electronic Components and Supplies

Supplies	Electrical systems and Lighting and components and accessories and supplies
Supplies	Distribution and Conditioning Systems and Equipment and Components
Supplies	Laboratory and Measuring and Observing and Testing Equipment
Supplies	Medical Equipment and Accessories and Supplies
Supplies	Information Technology Broadcasting and Telecommunications
Supplies	Office Equipment and Accessories and Supplies
Supplies	Printing and Photographic and Audio and Visual Equipment and Supplies
Supplies	Defense and Law Enforcement and Security and Safety Equipment and Supplies
Supplies	Cleaning Equipment and Supplies
Supplies	Service Industry Machinery and Equipment and Supplies
Supplies	Sports and Recreational Equipment and Supplies and Accessories
Supplies	Food Beverage and Tobacco Products
Supplies	Drugs and Pharmaceutical Products
Supplies	Domestic Appliances and Supplies and Consumer Electronic Products
Supplies	Apparel and Luggage and Personal Care Products
Supplies	Timepieces and Jewelry and Gemstone Products
Supplies	Published Products
Supplies	Furniture and Furnishings
Supplies	Musical Instruments and Games and Toys and Arts and Crafts and Educational Equipment and Materials and Accessories and Supplies
Supplies	Farming and Fishing and Forestry and Wildlife Contracting Services
Supplies	Mining and Oil and Gas Services
Supplies	Transportation and Storage and Mail Services